

EJERCICIOS FUNCIONES ELEMENTALES

1) Representa gráficamente las siguientes funciones:

$$\text{a) } y = \begin{cases} 3x - 2 & \text{si } x \leq 2 \\ -x & \text{si } x > 2 \end{cases}$$

$$\text{b) } y = \begin{cases} x - 1 & \text{si } x < -1 \\ 2 & \text{si } x \geq -1 \end{cases}$$

$$\text{c) } y = \begin{cases} x & \text{si } x \leq -2 \\ x^2 & \text{si } -2 < x < 2 \\ -x & \text{si } x \geq 2 \end{cases}$$

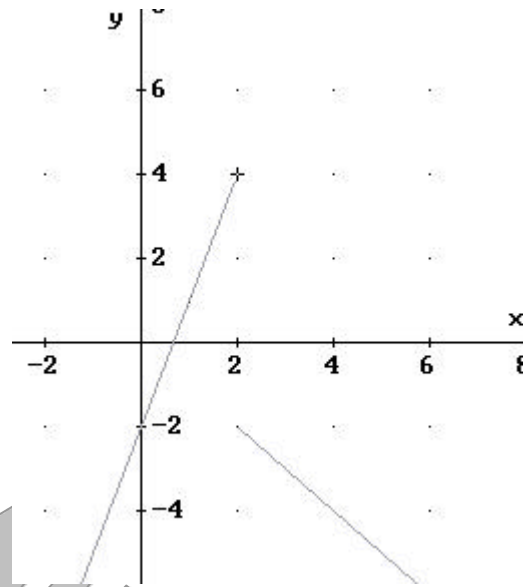
$$\text{d) } y = |x + 3|$$

$$\text{e) } y = \begin{cases} \frac{1}{x} & \text{si } x < -1 \\ 2x - 3 & \text{si } x \geq -1 \end{cases}$$

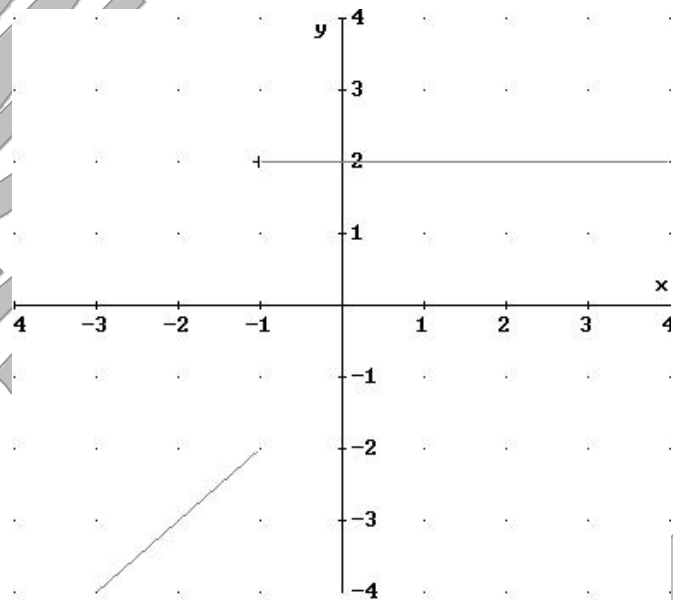
$$\text{f) } y = \begin{cases} x + 4 & \text{si } x < -1 \\ x^2 - 3 & \text{si } x \geq -1 \end{cases}$$

SOLUCIONES

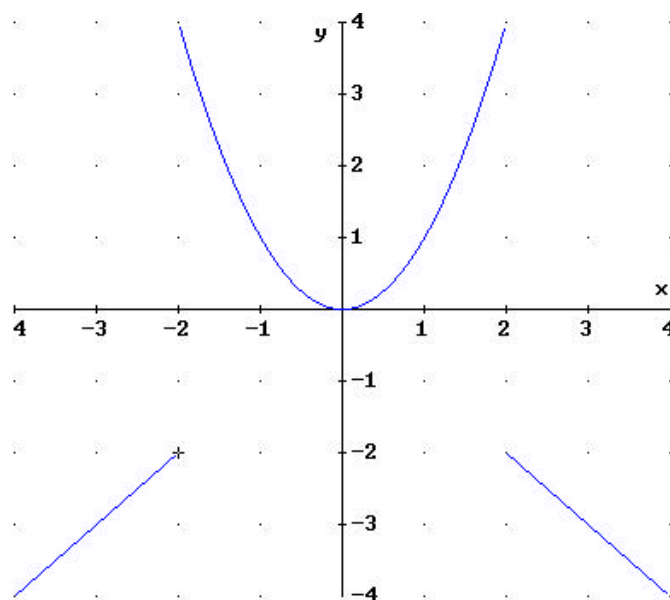
a) $y = \begin{cases} 3x - 2 & \text{si } x \leq 2 \\ -x & \text{si } x > 2 \end{cases}$



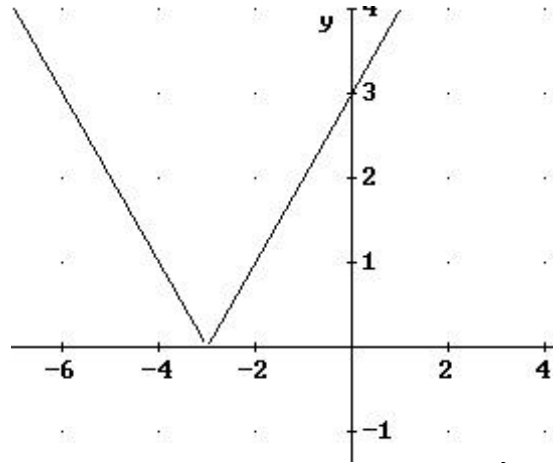
b) $y = \begin{cases} x - 1 & \text{si } x < -1 \\ 2 & \text{si } x \geq -1 \end{cases}$



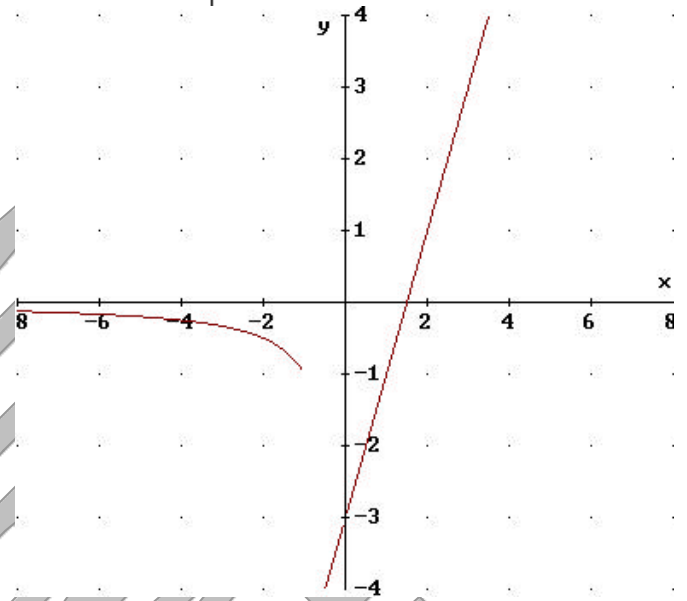
c) $y = \begin{cases} x & \text{si } x \leq -2 \\ x^2 & \text{si } -2 < x < 2 \\ -x & \text{si } x \geq 2 \end{cases}$



d) $y = |x + 3| = \begin{cases} -x - 3 & \text{si } x < -3 \\ x + 3 & \text{si } x \geq -3 \end{cases}$



e) $y = \begin{cases} \frac{1}{x} & \text{si } x < -1 \\ 2x - 3 & \text{si } x \geq -1 \end{cases}$



f) $y = \begin{cases} x + 4 & \text{si } x < -1 \\ x^2 - 3 & \text{si } x \geq -1 \end{cases}$

